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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,756	12/24/2003	Steven N. Simon	P3136-938	8932
21839 7590 04/15/2009 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER LI, GUANG W	
			ART UNIT 2446	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,756	<b>Applicant(s)</b> SIMON ET AL.	
	<b>Examiner</b> GUANG LI	<b>Art Unit</b> 2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 11, 12, 14, 16, 17, 27, 28, 38, 39, 41, 43, 44, 47, 48 and 51-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 11, 12, 14, 16, 17, 27, 28, 38, 39, 41, 43, 44, 47, 48 and 51-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/24/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Remark date 02/02/2009

2. Claims 1, 11-12, 14, 16-17, 27-28, 38-39, 41, 43-44, 47-48 and 51-57 are presented for examination.

### **Request for Continued Examination**

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/02/2009 has been entered.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 11-12, 14, 16-17, 27-28, 38-39, 41, 43-44, 47-48, and 51-57 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 52 is rejected under 35 U.S.C. 102(b) as being anticipated by Lim et al (US 6,014,660)

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7. Regarding claim 52, Lim teaches a method for a client computer to find a network address of a server computer, the method comprising:

performing a primary search procedure, the primary search procedure including searching a local storage of the client computer system for the network address of the server computer (When translation request failed from the local DNS database 116, will process recursive query to next DNS server lookup “Alternatively, execution continues at step 530 where the translation request is examined to determine if recursive translation has been requested. If recursive translation has been requested, execution continues at step 532. In step 532 the translation request is passed to a higher level DNS server system 102 for translation” see Lim: col.6 lines 55-58; col. 10 line 66- col. 11 line 17; Fig. 5 step 502-step 532) and

performing a backup search procedure if the network address of the server computer is not found using a primary search procedure (DNS client examines the translation request that using the symbolic name to perform DNS lookup to find the list of servers “In step 608, the DNS client process 214 examines the record retrieved from the client DNS database 216” see Lim: col.8 lines 37-53), the backup search procedure including searching a configuration record of the client computer system for the network address of the server computer (searching DNS database for the server the symbolic name for IP address “In step 504, which follows, the DNS server system 102 searches DNS database 116 for records associated with the symbolic name included in the translation request. In step 506 the result of this search is examined, by the DNS server system 102, to determine if any associated records were found in DNS database 116” see Lim: col.6 lines 55-61).

***Claim Rejections - 35 USC § 103***

8. Claims 1, 11-12, 14, 16-17, 27-28, 38-39, 41, 43-44, 47-48, 51 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al (US 6,014,660) in view of Pitsos (US 2006/0168445 A1).

9. Regarding claim 1, Lim teaches a method for a client computer to find a network address of a password server computer having a public key, the method comprising:

searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure (When translation request failed from the local DNS database 116, will process recursive query to next DNS server lookup “Alternatively, execution continues at step 530 where the translation request is examined to determine if recursive translation has been requested. If recursive translation has been requested, execution continues at step 532. In step 532 the translation request is passed to a higher level DNS server system 102 for translation” see Lim: col.6 lines 55-58; col. 10 line 66- col. 11 line 17; Fig. 5 step 502-step 532), wherein:

the backup search procedure searches for the server computer using the key to identify the serve computer (DNS client examines the translation request that using the symbolic name to perform DNS lookup to find the list of servers “In step 608, the DNS client process 214 examines the record retrieved from the client DNS database 216” see Lim: col.8 lines 37-53).

Lim does not explicitly discloses the public key is the identifier of the server computer and public key.

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However Pitsos teaches the public key is the identifier of the server computer and public key (public key information of the server address “the gateway 12 determines an internal network address of the internal device 13 based on the public key information included in the incoming data as well as the stored list of public key identifiers and associated internal network addresses” see ¶[0033]; ¶[0035]) in order to provide selectively in accordance with the entity requesting the information for security purpose.

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Lim to include (or to use, etc.) the public key is the identifier of the server computer and public key as taught by Pitsos in order to provide selectively in accordance with the entity requesting the information for security purpose.

10. Regarding claim 11, Lim together with Pitsos taught a method for a client computer to find a network address of a password server having a public key according to claim 1, as described above. Lim further comprising the step of establishing a connection with the server computer with the network address found (establish connection with client DNS database when translation found “In cases where a special record was retrieved from the client DNS database 216, the returned IP address is the IP address generated in step 608. In other cases, the returned IP address is the IP address included in the record retrieved from the client DNS database 216” see Lim: col.8 lines 55-61).

11. Regarding claim 12, Lim together with Pitsos taught a method for a client computer to find a network address of a password server having a public key according to claim 11, as described above. Pitsos further comprising the step of authenticating the server computer after the connection has been established (authentication processes “The cryptographic unit 26

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performs any required encryption, decryption, signature, signature verification or authentication processes” see Pitsos: ¶[0043]).

12. Regarding claim 14, Lim together with Pitsos taught a method for a client computer to find a network address of a password server having a public key according to claim 11, as described above. Lim further comprising the step of populating a local storage of the client computer with a list of network addresses for server computers after the connection has been established (list of preferred address “For example, if the record includes a symbolic name and a preferred IP address, the client DNS process 214 translates the symbolic name to generate a list of all IP Addresses that correspond to the symbolic name. Preferably, this translation is performed by sending a DNS request to the DNS server system 102. After translating the symbolic name, the client DNS process 214 tests to see if the preferred address is included in the list of addresses” see Lim: col.8 lines 37-54).

13. Regarding claim 16, Lim together with Pitsos taught a method for a client computer to find a network address of a password server having a public key according to claim 1, as described above. Lim further teaches wherein the primary and backup search procedures are performed in parallel (iterative translation perform parallel DNS lookup “When client-sensitive translation is not required, the DNS server performs iterative or recursive DNS translation” see Lim: Abstract).

14. Regarding claim 17, claim 17 is rejected for the same reason as claim 1 set forth hereinabove. Regarding claim 17, Lim together with Pitsos taught the claimed method, therefore together, they teach the claimed system.

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15. Regarding claim 27, claim 27 is rejected for the same reason as claim 16 as set forth hereinabove.

16. Regarding claim 28, claim 28 is rejected for the same reasons as claim 1 set forth hereinabove. Regarding claim 28, Lim together with Pitsos taught the claimed method, therefore together, he teaches the claimed computer readable data storage device.

17. Regarding claim 38, claim 38 is rejected for the same reason as claim 11 as set forth hereinabove.

18. Regarding claim 39, claim 39 is rejected for the same reason as claim 12 as set forth hereinabove.

19. Regarding claim 41, claim 41 is rejected for the same reason as claim 14 as set forth hereinabove.

20. Regarding claim 43, claim 43 is rejected for the same reason as claim 16 as set forth hereinabove.

21. Regarding claim 44, Lim teaches a method of a client computer to locate a network address of a server computer on a computer network, said server computer having a public key that is an identifier of the server computer, the method comprising the following steps:

searching for the address of the server computer in a local system storage of the client computer (search DNS database 116 “In step 504, which follows, the DNS server system 102 searches DNS database 116 for records associated with the symbolic name included in the translation request” see Kim: col.6 lines 55-58); and

performing a backup search procedure if the address is not found in the local system storage (When translation request failed from the local DNS database 116, will process recursive



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query to next DNS server lookup “Alternatively, execution continues at step 530 where the translation request is examined to determine if recursive translation has been requested. If recursive translation has been requested, execution continues at step 532. In step 532 the translation request is passed to a higher level DNS server system 102 for translation” see Lim: col.6 lines 55-58; col. 10 line 66- col. 11 line 17; Fig. 5 step 502-step 532), the backup search procedure being selected from **a group** of search procedures including the following:

- broadcasting a message over the network to identify the address of the server computer;
- searching an authentication record for the address of the server computer;
- using a loop back address to connect to the server computer;
- using a inter process communication to determine whether the server computer is running on a same CPU as the client computer in order to determine the network address; and
- searching a configuration record of the client computer for the address of the server computer (searching DNS database for the server the symbolic name for IP address “In step 504, which follows, the DNS server system 102 searches DNS database 116 for records associated with the symbolic name included in the translation request. In step 506 the result of this search is examined, by the DNS server system 102, to determine if any associated records were found in DNS database 116” see col.6 lines 55-61).

Lim does not explicitly discloses wherein one or more of said search procedures searches for the server computer using the public key to identify the server computer.

However Pitsos teaches wherein one or more of said search procedures searches for the server computer using the public key to identify the server computer (public key information of the server address “the gateway 12 determines an internal network address of the internal device

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13 based on the public key information included in the incoming data as well as the stored list of public key identifiers and associated internal network addresses” see ¶[0033]; ¶[0035]) in order to provide selectively in accordance with the entity requesting the information for security purpose.

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Lim to include (or to use, etc.) wherein one or more of said search procedures searches for the server computer using the public key to identify the server computer as taught by Pitsos in order to provide selectively in accordance with the entity requesting the information for security purpose.

22. Regarding claim 47, Lim together with Pitsos taught a method for a client computer to find a network address of a server according to claim 44, as described above. Lim further teaches wherein the backup search procedure is performed in parallel with searching the local system storage of the client (searching local DNS database “In step 506 the result of this search is examined, by the DNS server system 102, to determine if any associated records were found in DNS database 116” see Lim: col.6 lines 57-63; Fig.1 item 116).

23. Regarding claim 48, claim 48 is rejected for the same reason as claim 44 as set forth hereinabove. Regarding claim 44, Lim together with Pitsos taught the claimed method, therefore together, they teach the claimed system.

24. Regarding claim 51, claim 51 is rejected for the same reason as claim 47 as set forth hereinabove.

25. Regarding claim 53, Lim taught the method for a client computer to find a network address of a server computer as described hereinabove. Lim does not explicitly disclose the

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server computer is a password server computer having a public key that is an identifier of the server computer, and the primary search procedures or the backup search procedures searches for the server computer using the public key to identify the server computer.

However Pitsos teaches the server computer is a password server computer having a public key that is an identifier of the server computer, and the primary search procedures or the backup search procedures searches for the server computer using the public key to identify the server computer (public key server and public key information of the server address “the gateway 12 determines an internal network address of the internal device 13 based on the public key information included in the incoming data as well as the stored list of public key identifiers and associated internal network addresses” see ¶[0033]; ¶[0035]) in order to provide selectively in accordance with the entity requesting the information for security purpose.

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Lim to include (or to use, etc.) the server computer is a password server computer having a public key that is an identifier of the server computer, and the primary search procedures or the backup search procedures searches for the server computer using the public key to identify the server computer as taught by Pitsos in order to provide selectively in accordance with the entity requesting the information for security purpose.

26. Regarding claim 54, Lim teaches a method for a client computer to find a network address of a server computer, the method comprising:

performing a primary search procedure (search DNS database 116 “In step 504, which follows, the DNS server system 102 searches DNS database 116 for records associated with the symbolic name included in the translation request” see Kim: col.6 lines 55-58); and

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performing a backup search procedure if the network address of the server computer is not found using a primary search procedure (When translation request failed from the local DNS database 116, will process recursive query to next DNS server lookup “Alternatively, execution continues at step 530 where the translation request is examined to determine if recursive translation has been requested. If recursive translation has been requested, execution continues at step 532. In step 532 the translation request is passed to a higher level DNS server system 102 for translation” see Lim: col.6 lines 55-58; col. 10 line 66- col. 11 line 17; Fig. 5 step 502-step 532).

Lim does not explicitly disclose backup search procedure searching an authentication record for the network address of the server computer.

However Pitsos teaches the backup search procedure searching an authentication record for the network address of the server computer (authentication processes “The cryptographic unit 26 performs any required encryption, decryption, signature, signature verification or authentication processes” see Pitsos: ¶[0043]) in order to provide security purpose.

It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Lim to include (or to use, etc.) backup search procedure searching an authentication record for the network address of the server computer as taught by Pitsos in order to provide security purpose.

27. Claims 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al (US 6,014,660) in view of Kulkarni et al. (US 2003/0182433 A1).

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28. Regarding claim 55, Lim teaches a method for a client computer to find a network address of a server computer, the method comprising:

performing a primary search procedure (search DNS database 116 “In step 504, which follows, the DNS server system 102 searches DNS database 116 for records associated with the symbolic name included in the translation request” see Kim: col.6 lines 55-58); and

performing a backup search procedure if the network address of the server computer is not found using a primary search procedure (When translation request failed from the local DNS database 116, will process recursive query to next DNS server lookup “Alternatively, execution continues at step 530 where the translation request is examined to determine if recursive translation has been requested. If recursive translation has been requested, execution continues at step 532. In step 532 the translation request is passed to a higher level DNS server system 102 for translation” see Lim: col.6 lines 55-58; col. 10 line 66- col. 11 line 17; Fig. 5 step 502-step 532).

Lim does not explicitly disclose backup search determining whether the server computer is running on a CPU that is the same CPU on which the client computer is running in order to determine the network address of the server computer.

Kulkarni teaches backup search determining whether the server computer is running on a CPU that is the same CPU on which the client computer is running in order to determine the network address of the server computer (using loopback address to determines home agent address “The virtual Home Agent address may be implemented in a variety of ways, such as through the use of a loopback address” see Kulkarni: ¶[0042]) in order to efficient using resource and testing connectivity between the nodes.

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It would have been obvious to one of ordinary skill in the art at the time of invention to create the invention of Lim to include (or to use, etc.) the backup search determining whether the server computer is running on a CPU that is the same CPU on which the client computer is running in order to determine the network address of the server computer by Kulkani in order to provide selectively in accordance with the entity requesting the information for security purpose.

29. Regarding claim 56, Lim together with Kulkani taught a method according to claim 55, as described above. Kulkani further teaches wherein determining whether the server computer is running on the same CPU as the client computer comprises: using a loop back address of the server computer (using loopback address to determines home agent address “The virtual Home Agent address may be implemented in a variety of ways, such as through the use of a loopback address” see Kulkarni: ¶[0042]).

30. Claims 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al (US 6,014,660) in view of Kulkani et al. (US 2003/0182433 A1) and in further view of Fraser (US 5,434,914).

31. Regarding claims 57, Lim together with Kulkani taught the a method according to claim 55 as set hereinabove.

Lim together with Kulkani do not explicitly discloses determining whether the server computer is running on a CPU of the client computer comprises sending out an inter process communication to the CPU.

Fraser teaches determining whether the server computer is running on a CPU of the client computer comprises sending out an inter process communication to the CPU (communication between the components may be by means of function invocations or inter-process

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communications see Fraser: col.8 lines 35-38). Fraser further provides the advantage of a translation of a name into a network address done in a first node of a network (see Fraser: col.3 lines 14-16).

It would have been obvious to one of ordinary skill in the art, having the teachings of Lim together with Kulkani before them at the time the invention was made to modify the method to find network address of server computer of Lim together with Kulkani to includes whether the server computer is running on a CPU of the client computer comprises sending out an inter process communication to the CPU as taught by Fraser.

One of ordinary skill in the art would have been motivated to make this modification in order to provide unique way communication between the components for improve communication system in view of Fraser.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guang Li whose telephone number is (571) 270-1897. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 13, 2009  
GL  
Patent Examiner

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit

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